

## General

### Title

Sarcoma: proportion of patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST who have mutational analysis within 3 months of diagnosis.

### Source(s)

NHS Scotland, Scottish Cancer Taskforce. Sarcoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 May 20. 33 p. [30 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the proportion of patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST who have mutational analysis within 3 months of diagnosis.

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#).

## Rationale

All small bowel gastrointestinal stromal tumours (GISTs) and all intermediate and high risk GISTs, regardless of location, should have mutational analysis (Reid et al., 2009). This will provide information on the tumour and will allow for a more detailed prognosis. In addition, mutational analysis can provide important information that will influence the type of treatment to use (European Sarcoma Network Working Group [ESMO], 2012; The Royal College of Pathologists, 2012; Cerski et al., 2011).

Mutational analysis should include at least assessment of KIT exons 9 and 11, and platelet-derived growth factor receptor, alpha polypeptide (PDGFRA) exons 12 and 18 for mutations. If apparently wildtype, additional exons will need to be examined to rule out rare primary mutations (Reid et al., 2009).

## Evidence for Rationale

Cerski MR, Pereira F, Matte US, Oliveira FH, Crusius FL, Waengertner LE, Osvaldt A, Fornari F, Meurer L. Exon 11 mutations, Ki67, and p16(INK4A) as predictors of prognosis in patients with GIST. *Pathol Res Pract*. 2011 Nov 15;207(11):701-6. [PubMed](#)

European Sarcoma Network Working Group (ESMO). Gastrointestinal stromal tumors: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. *Ann Oncol*. 2012 Oct;23 Suppl 7:vii49-55. [PubMed](#)

NHS Scotland, Scottish Cancer Taskforce. Sarcoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 May 20. 33 p. [30 references]

Reid R, Bulusu R, Carroll N, et al. Guidelines for the management of gastrointestinal stromal tumours (GIST). London (UK): Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland (AUGIS); 2009.

The Royal College of Pathologists. Dataset for gastrointestinal stromal tumours (GISTs). London (UK): The Royal College of Pathologists; 2012.

## Primary Health Components

Sarcoma; high risk or moderate risk gastrointestinal stromal tumour (GIST); small bowel GIST; primary metastatic GIST; mutational analysis

## Denominator Description

All patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST at diagnosis

## Numerator Description

Number of patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST who have mutational analysis within 3 months of diagnosis

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

## Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

Hospital Outpatient

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

### Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Unspecified

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

Timeliness

# Data Collection for the Measure

## Case Finding Period

Unspecified

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

All patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST at diagnosis

### Exclusions

None

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Number of patients with high or moderate risk gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST who have mutational analysis within 3 months of diagnosis

### Exclusions

None

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Prescriptive Standard

Target: 90%

The tolerance within this target is designed to account for situations where the patient died before the clinical features of gastrointestinal stromal tumour (GIST), small bowel GISTs and primary metastatic GIST were identified and reported.

## Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce. Sarcoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 May 20. 33 p. [30 references]

## Identifying Information

### Original Title

QPI 5 – molecular staging of gastrointestinal stromal tumour (GIST).

### Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

### Measure Set Name

Sarcoma

## Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Funding Source(s)

Scottish Government

## Composition of the Group that Developed the Measure

Sarcoma QPI Development Group

## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2016 May

## Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence. Formal reviews are conducted every 3 years and baseline checks each year.

## Date of Next Anticipated Revision

2017 Dec

## Measure Status

This is the current release of the measure.

## Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: [comments.his@nhs.net](mailto:comments.his@nhs.net); Web site: [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/) .

## Companion Documents

The following is available:

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on May 16, 2017.

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## Production

### Source(s)

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